LISTING OF CLAIMS:

1. (currently amended) An electronic power converter, comprising:

an encapsulated portion including at least high-voltage electronic circuitry where components of the at least high-voltage electronic circuitry surrounded by an encapsulating material that is substantially free of voids therein; and

an integrated connector for receiving a detachable AC line cord having at least two wires therein;

wherein said power converter is suitable for mounting on a printed circuit board.

2. (original) The power converter of claim 1, further comprising an inrush current limiting circuit, said inrush current limiting circuit, including:

a. a rectifier with a DC return path;

b. a MOSFET switch connected to the DC return path of the bridge rectifier;

c. a capacitor which is charged via a current limited source;

d. a voltage level detection circuit to maintain the MOSFET switch in an off state until a line voltage reaches a near zero threshold;

e. a resistive charging path to turn the MOSFET switch to an on state once the line voltage reaches the near zero threshold; and

f. a resistive connection to a housekeeping supply of the power converter which maintains the MOSFET switch in the on state.

3. (original) The power converter of claim 1, further comprising:

a secondary side, isolated low voltage ON/OFF function, said function being implemented by circuitry including a transformer coupled peak detector to power a light emitter of an opto-coupler which has a photo-detector, the photo-detector being connected to the switching controller in a manner adequate to disable the power supply output in response to the signal received by the photo-detector, said emitter is also connected to a user accessible ON/OFF pin.

4. (original) The power converter of claim 1, further comprising a low voltage sense function consisting of a peak detector connected to the power supply transformer for sensing a primary rectified voltage in a secondary low voltage manner and providing a representative signal to a pin that is accessible to the user.

5. (original) The power converter of claim 4, further comprising:

a comparison circuit, connected to the peak detector, for comparing the peak detected voltage to a known reference voltage and producing a signal indicating the range that the primary rectified voltage is within..

6. (original) The power converter of claim 1, further comprising:

a secondary side, isolated low voltage ON/OFF function; and

a low voltage sense function, said functions being implemented by circuitry including a peak detector for sensing the instantaneous primary rectified voltage connected to a linear regulator / voltage limiting circuit, said linear regulator / voltage limiting circuit being further connected to a light emitter of an opto-coupler, said opto-coupler being further connected to an error amplifier and an ON/OFF pin in such a manner as to provide a isolated secondary low voltage indication of the primary line voltage and to allow the user to turn the device off.

7. (original) An electronic encapsulated power converter, comprising:

a case;

an integrated, 3-pin detachable line cord connector accessible through said case; and

threaded mounts extending from said case, wherein the threaded mounts are earth grounded and allow the converter to be rigidly mounted to a circuit board.

8. (previously presented) An encapsulated power converter having an inrush current limiting circuit, said inrush current limiting circuit, including:

a. a bridge rectifier with a DC return path;

b. a MOSFET switch connected to the DC return path of the bridge rectifier;

c. a capacitor which is charged via a current limited source;

d. a voltage level detection circuit to maintain the MOSFET switch in an off state until a line voltage reaches a near zero threshold;

e. a resistive charging path to turn the MOSFET switch to an on state once the line voltage reaches the near zero threshold; and

f. a resistive connection to a housekeeping supply of the power converter which maintains the MOSFET switch in the on state;

wherein said current limiting circuit is encapsulated with the power converter.

9. (original) The power converter of claim 8, further comprising:

a secondary side, isolated low voltage ON/OFF function, said function being implemented by circuitry including a transformer coupled peak detector to power a light emitter of an opto-coupler which has a photo-detector, the photo-detector being connected to the primary controller in a manner adequate to disable the power supply output in response to the signal received by the photo-detector, said emitter is also connected to a user accessible ON/OFF pin.

10. (original) The power converter of claim 8, further comprising a low voltage sense function consisting of a peak detector connected to the power supply transformer for sensing a primary rectified voltage in a secondary low voltage manner and providing a representative signal to a pin that is accessible to the user.

11. (original) The power converter of claim 10, further comprising:

a comparison circuit, connected to the peak detector, for comparing the peak detected voltage to a known reference voltage and producing a signal indicating the range that the primary rectified voltage is within.

12. (original) The power converter of claim 8, further comprising:

a secondary side, isolated low voltage ON/OFF function; and

a low voltage sense function, said functions being implemented by circuitry including a peak detector for sensing the instantaneous primary rectified voltage connected to a linear regulator / voltage limiting circuit, said linear regulator / voltage limiting circuit being further connected to a light emitter of an opto-coupler, said opto-coupler being further connected to an error amplifier and an ON/OFF pin in such a manner as to provide a isolated secondary low voltage indication of the primary line voltage and to allow the user to turn the device off.

13. (original) The power converter of claim 10, wherein the low voltage sense function is implemented by circuitry including:

a. a comparison circuit which compares an instantaneous primary voltage to a known reference voltage;

b. a peak detector, electrically connected to said comparison circuit, for sensing the instantaneous primary voltage and providing a signal indicating the instantaneous primary voltage to the comparison circuit, and

c. an independent pin, connected to the comparison circuit to provide an output signal when the instantaneous primary voltage is determined to be below the reference voltage.

14. (currently amended) An electronic device, comprising;

at least one circuit board located within the device;

a cover enclosing the electronic device; and

an electronic power converter including fully encapsulated electronic circuitry; and an integrated connector, accessed through an aperture in said cover, for receiving a detachable AC line cord having at least two wires therein, wherein said power converter is mounted on said circuit board.

15. (original) The electronic device of claim 14, wherein said integrated connector of the power converter provides connection to an AC utility line source that is independent of the circuit board to which the power converter is attached.

16. (original) The electronic device of claim 14, wherein said power converter is encapsulated within a thermally conductive dielectric material.

17. (original) The electronic device of claim 16, further comprising an inrush current limiting circuit, said inrush current limiting circuit, including:

a. a rectifier with a DC return path;

b. a MOSFET switch connected to the DC return path of the bridge rectifier;

c. a capacitor which is charged via a current limited source;

d. a voltage level detection circuit to maintain the MOSFET switch in an off state until a line voltage reaches a near zero threshold;

e. a resistive charging path to turn the MOSFET switch to an on state once the line voltage reaches the near zero threshold; and

f. a resistive connection to a housekeeping supply of the power converter which maintains the MOSFET switch in the on state.

18. (original) The electronic device of claim 17, further comprising:

a secondary side, isolated low voltage ON/OFF function, said function being implemented by circuitry including a transformer coupled peak detector to power a light emitter of an opto-coupler which has a photo-detector, the photo-detector being connected to the primary controller in a manner adequate to disable the power supply output in response to the signal received by the photo-detector, said emitter is connected to a user accessible ON/OFF pin.

19. (original) The electronic device of claim 17, further comprising a low voltage sense function consisting of a peak detector connected to the power supply transformer

for sensing a primary rectified voltage in a secondary low voltage manner and providing a representative signal to a pin that is accessible to the user.

20. (original) The electronic device of claim 19, further comprising:

a comparison circuit, connected to the peak detector, for comparing the peak detected voltage to a known reference voltage and producing a signal indicating the range that the primary rectified voltage is within.

21. (original) The electronic device of claim 17, further comprising:

a secondary side, isolated low voltage ON/OFF function; and

a low voltage sense function, said functions being implemented by circuitry including a peak detector for sensing the instantaneous primary rectified voltage connected to a linear regulator / voltage limiting circuit, said linear regulator / voltage limiting circuit being further connected to a light emitter of an opto-coupler, said opto-coupler being further connected to an error amplifier and an ON/OFF pin in such a manner as to provide a isolated secondary low voltage indication of the primary line voltage and to allow the user to turn the device off.